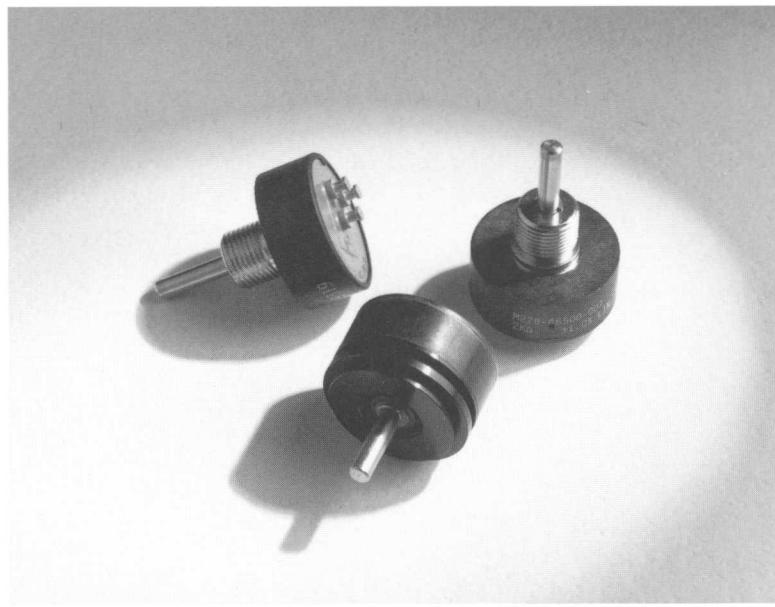


The M22 rotary potentiometer, available in servo and bushing mount, utilizes wear resistant MystR® conductive plastic film combined with precious metal wipers to produce a quiet operating, low noise, stable signal. Gold plated terminals are designed to eliminate the tarnish factor often encountered in assembly soldering operations. The high quality components are packaged in a cost effective housing designed with an anodized aluminum face plate or chrome plated brass bushing to handle assembly and operating loads.

The M22 series potentiometers are used in position sensing applications which demand high reliability at low cost.



#### Features

- MystR plastic element
- Aluminum face plate (M22S)
- Integral terminations
- Chrome plated brass bushing (M22B)

#### Benefits

- Tested up to 25 million operations
- Withstands assembly and operating loads
- No internal leads to break under vibration
- Withstands assembly and operating loads

#### Applications

- Robotics
- Medical rehabilitation equipment
- Animated characters
- Laboratory equipment handling
- Water treatment devices
- Packaging equipment
- Office machines



DATA INSTRUMENTS®

## Technical Specifications

Model	Unit	M22B	M22S
<b>MECHANICAL</b>			
Case Diameter	in. (mm)	7/8 (22)	
Total Mechanical Travel	degrees	330	continuous
Starting Torque (max)	oz. in.	1.0	0.3
Shaft Run Out (max)	in.	NA	.003
Stop Strength	in. lb.	5	NA
Temperature Range	°C	-40 to +85	
Life	operations	25 million	
Bearings		sleeve	
Total Weight	oz. (g)	12 (340)	9.8 (278)
Terminals		gold	

## ELECTRICAL

Theoretical Electrical Travel	degrees	320	340
Independent Linearity*	±%	1	
Total Resistance		2K	
Resistance Tolerance	±%	20	
Output Smoothness	%	0.1	
Resistance Temperature Characteristic	±%	5	
Resolution		infinite	
Dielectric w/standing V	V rms	750	
Power Rating	Watts	0.4	
Wiper Current (max)	µA	<1	

## OPTIONS\*\*

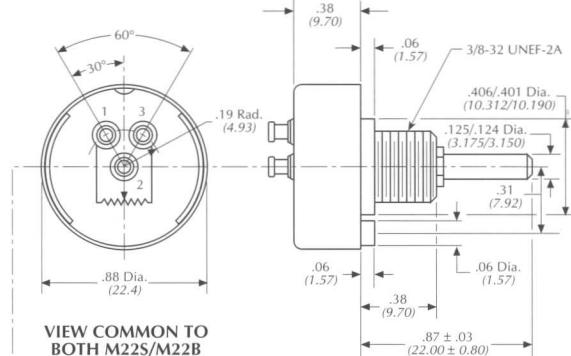
Shaft		Flat or Screwdriver slot	
Shaft Diameter	in.	1/4	NA
Anti-Rotational Pin		Available without	NA
Resistance Values		1K, 5K, 10K	
Resistance Tolerance	±%	10	
Independent Linearity*	±%	.5	.5, .25

## ORDERING INFORMATION

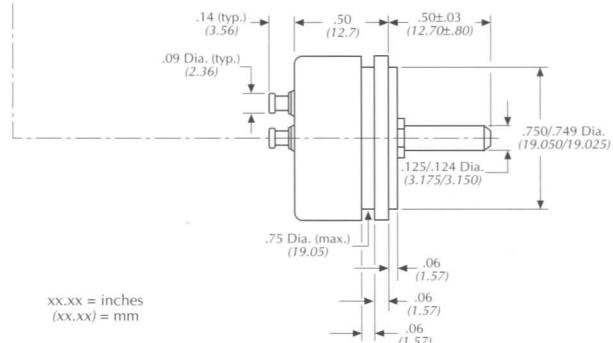
Item numbers are for standard models only.

Model	Item Number
M22B	F46500007
M22S	F46600010

## Dimensions



Hardware Kit Supplied  
M22B POTENTIOMETER

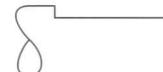


M22S POTENTIOMETER

## Optional Slot or Flat Dimensions



Slot: 1/32" wide x 1/16" deep



Flat: 1/32" deep x 3/8" long

(Drawing not to scale)

\* 5 to 95% of Theoretical Electrical Travel

\*\* Minimum quantities may be required.

NOTE: Do not test using an Ohmmeter on a Rx1 scale or other current devices. Excessive wiper current may cause output errors and will cause damage. Zero side load is recommended to achieve maximum performance.

### WARRANTY

All Data Instruments products are warranted against defective materials and workmanship for a period of one year from the date of delivery to the original purchaser. Any product that is found within the one year period not to meet these standards will be replaced or repaired at the discretion of Data Instruments. No other warranty is expressed or implied. Data Instruments accepts no responsibility for misuse, misapplication or unauthorized modification of its products. Data Instruments accepts no liability for damages, including, any anticipated or lost profits, incidental damages, consequential damages, costs, time charges or other losses incurred in connection with the purchase, installation, repair or operation of our products, or any part thereof.

Specifications subject to change without notice.